

# Design LED 60 Strip WA™

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#### 1. GENERAL INFORMATION

**INTRODUCTION**: Congratulations, you have just purchased one of the most innovative and reliable LED fixtures on the market today! The Design LED 60 Strip WA,™ has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

**UNPACKING:** Thank you for purchasing the Design LED 60 Strip WA™ by Elation Professional®. Every Design LED 60 Strip WA™ has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for damage and be sure all accessories necessary to operate the fixture have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this unit to your dealer without first contacting customer support at the number listed below.

Inside the box you should find: the fixture, a DMX XLR cable, an IEC power cable, an IEC "jumper" power cable, a safety cable, and this manual. Please contact customer support at the number listed below if any of the above items are missing.

**CUSTOMER SUPPORT:** Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation Professional®. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (323) 582-3322 Fax: (323) 582-3108

E-mail: <u>support@elationlighting.com</u>

Forum: www.ElationLighting.com/forum

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to

rain or moisture.

**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself. Doing so will void your manufactures warranty.

Please do not discard the shipping carton in the trash. Please recycle whenever possible.

WARRANTY REGISTRATION: The Design LED 60 Strip WA™ carries a two year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support at (323) 582-3322.

#### 2. SAFETY INSTRUCTIONS



To guarantee proper and consistent operation, it is important to follow the guidelines in this manual. Elation Professional will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

- Always be sure that the fan and the air inlets remain clean and are never blocked. Allow about 6" (15cm) between this fixture and other devices or a wall to allow for proper cooling.
- 2. Never touch the fixture during normal operation.
- 3. Never look directly into the lamp beam. You risk injury to your retina, which may induce blindness.
- 4. For safe operation, follow the Installation guide described in chapter two of this manual. Operating the Design LED 60 Strip WA™ without suited safety aids such as safety cables or clamps can increase the risk of damage and/or personal injury.
- 5. Installation should only be performed by qualified and certified personal.
- 6. When mounting this fixture, use only the original rigging points included with this fixture. Any structural modification will void the original manufactures warranty and may increase the risk of damage and/or personal injury.
- 7. To reduce the risk of fire or shock, do not expose this fixture to rain or moisture.
- Do not attempt to operate this fixture if the power cord has become damaged or frayed.
- 9. Never open this fixture while in use.
- 10. This device falls under protection-class I. Therefore it is essential that the device be grounded properly.
- 11. All electrical connections must performed by qualified personal.
- 12. Be sure the available voltage matches the voltage requirements of the unit. Be

- sure the power cord is never crimped or damaged. If the power cord is damaged, replace it immediately with a new one of similar power rating.
- 13. Always disconnect from main power before performing any type of service or any cleaning procedure.
- 14. Only handle the power cord by the plug. Never pull out the plug by tugging the wire portion of the cord.
- 15. Please be aware that damages caused by modifications to the device are not subject to warranty.

**Important Notice:** Damages resulting from the disregard of safety and general user instructions found in this user manual are not subject to any warranty claims.



#### **CAUTION!**

Never touch the device during operation! The housing may heat up



#### **CAUTION!**

Never look directly into the light source, as sensitive persons may suffer an epileptic shock.

#### 3. FEATURES

- Low power consumption
- Minimal heat emission
- Maintenance free operation
- Equipped with 60 one-watt LEDs: (40 White, 20 Amber)
- High power LEDs manufactured by Lumileds, USA
- 100,000 hours <u>rated</u> LED life
- Seamless color changing Warm to Cool white
- USITT DMX-512 complaint
- 5-pin and 3-pin Male and Female XLR Data Connectors
- Preprogrammed macros
- Strobe-effect with a maximum flash rate of 18fps
- DMX-controlled operation or stand-alone operation with Master/Slave-function
- 8 built-in programs accessed via DMX-controller or manually
- Sound-Active operation via built-in microphone
- Individual control over each LED
- Electronic/Switching power supply (100v~240 50/60Hz)
- Two DMX Modes:
  - 2 DMX-channels
  - 4 DMX-channels
- Flicker-free operation for television and film
- Compact design: fits in 12" box truss
- Brilliant light output
- Linkable power supply (in and out power connectors) up to 8 units.
- 91° Beam Angle

#### 4. GENERAL GUIDELINES

This fixture is a professional lighting effect designed for use on stage, in nightclubs, in theatres, and other types of architectural installations. Do not attempt operation or installation without a proper knowledge on how to do so.

This fixture was designed for indoor use only; use of this fixture outside will void the manufacture's warranty.

Consistent operational breaks will ensure that the fixture will function properly for many years to come.

Do not shake the fixture around. Avoid brute force when installing or operating the fixture.

While choosing an installation location, please be sure that the fixture will not be exposed to extreme heat, moisture, or dust. The minimum distance between the fixture and a wall or flat surface should be at least .5 meter (about 1.5ft).

Always install the fixture with an appropriately rated safety cable. When installing the fixture in a suspended environment always be sure to use mounting hardware no less than M10 x 25 mm, also be sure the hardware is only inserted in the yoke's mounting holes.

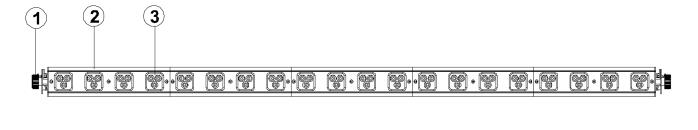
Do not attempt to operate this fixture until you have familiarized yourself with all of its functions.

Do not permit operation by persons not qualified for operating this type of theatrical fixture. Most damages are the result of improper operation.

Please use the original packaging to transport the fixture in for service.

For your own safety, please read this user manual carefully before installing the device.

#### 5. FIXTURE OVERVIEW





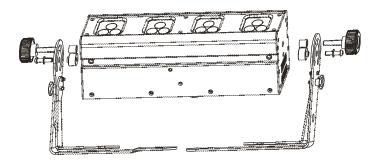
- 1. **Bracket Locking Knob** This knob is used to secure the bracket in place after angle adjustments have been made.
- 2. **Diffusing Lens –** This lens is used to both protect the LEDs as well as diffuse the light output.
- 3. **LED Assembly –** LED assembly 3x1watt LEDs
- **4. DMX Input Jack –** This jack accepts an incoming DMX signal via a male, 3-pin or a 5-pin XLR jack.
- **5. DMX Output Jack –** This jack is used to send an incoming DMX signal to the next fixture in the DMX chain via a female, 3-pin or a 5-pin XLR jack.
- **6.** Power Output Jack Use this jack to jump power to another Design LED 60 Strip WA.™
- 7. Power Input/Fuse Holder Assembly This assembly holds the safety fuse as well

as provides a female IEC connector for a power cord. Always replace the fuse with an exact match unless otherwise specified by an authorized Elation Service Technician. Using a fuse other than that specified could seriously damage the unit and will void your manufactures warranty.

- 8. On/Off Power Switch Controls main power to the unit.
- 9. Dipswitch Assembly These dipswitches are used to set the DMX address, master–slave settings, and other special functions. See the dipswitch chart on page 16 for more information on the dipswitch functions.
- **10. Hanging Bracket –** The unit uses a unique sectional bracket that allows the unit to be hung, mounted, or stood straight up.

#### 6. SET-UP AND INSTALLATION

**Yoke Assembly – Single Unit Operation** (*DLED 12 Brick shown for illustration purposes only*). The device can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics. When connecting the hanging yoke to the fixture, refer to the illustration below.



#### **Cautions:**

For added protection mount the fixtures in areas outside walking paths, seating areas, and away from areas were the fixture might be reached by unauthorized personal.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

To avoid injury, never stand directly below the device when mounting, removing, or servicing the fixture.



Refer to regulations BGV C1 (formerly VBG 70) and DIN VDE0711-217 for proper installation in Europe To ensure proper installation, only qualified staff should attempt installation.

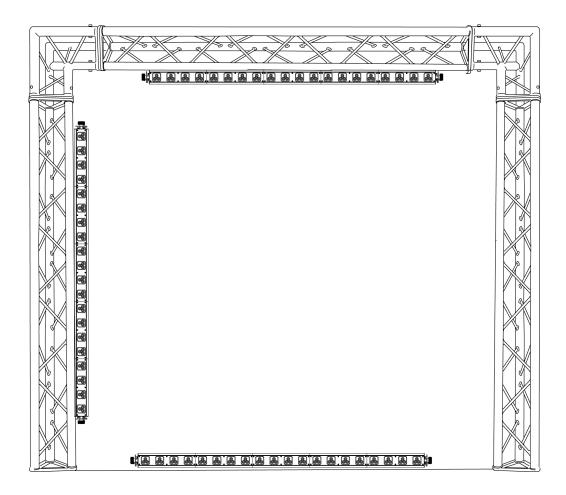
#### **Mounting points**

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

#### **Mounting Positions**

The Design LED 60 Strip WA™ is fully operational in different mounting positions, hanging upside-down from a ceiling, side mounted, or set on a flat level surface. Be sure this fixture is kept at least 0.5m away from any flammable materials (decoration etc.). When clamp mounting; always use and install the supplied safety cable as an added safety measure to prevent accidental damage in the event of a clamp failure. **See the image below.** 





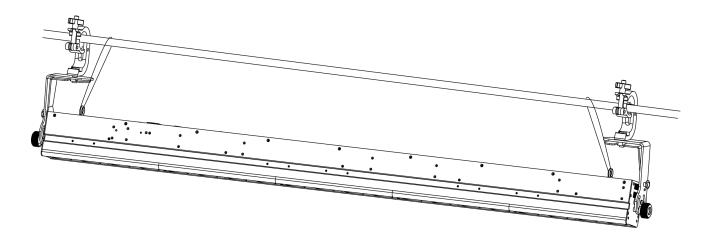
#### **CAUTION!**

Be sure a qualified electrician performs all electrical connections before attempting any operation.

#### **Clamp Mounting**

The Design LED 60 Strip WA™ provides a unique mounting bracket assembly that allows the unit to stand on flat surface, hang on truss via a clamp, or be used in cluster allow multiple units to rigged together (see the illustration below). Regardless of the mounting option you choose please refer to the safety guidelines in this manual to avoid damage to the unit and/or injury to persons.

When mounting this fixture to truss be sure to secure an appropriately rated clamp to the hanging yoke using a M10 screw fitted through the center hole of the hanging yoke. As an added safety measure be sure to attach at least one properly rated safety cable to the fixture. See illustration below.



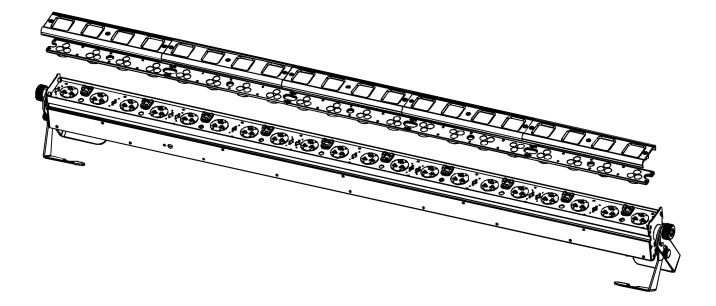
#### Securing the Design LED 60 Strip WA™



Always secure your fixture with a safety cable when suspending the unit from truss or other means. The fixture provides a built-in rigging point for a safety cable as illustrated above. Be sure to only use the designated rigging point for a safety cable. Never secure a safety cable to the hanging bracket.

## **Lens Removal and Replacement**

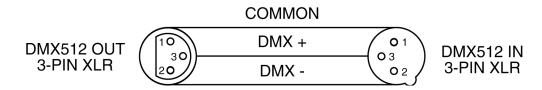
The front lens assembly may be removed to change the beam angle or to change the frost filters. The cover is conveniently attached with 1/4" twist lock Philips fasteners. To remove the top cover use a #2 Philips screwdriver and turn the 15 retaining fasteners counterclockwise.



#### 7. UNDERSTANDING DMX

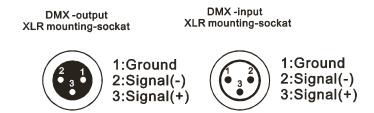
#### Data Cable (DMX Cable) Requirements (For DMX and Master/Slave Operation):

Your fixture and your DMX controller require a standard 3-pin or 5-pin XLR connector for data input and data output (see figure below). Be sure to only use properly rated DMX cables for DMX operation and not standrd audio cables. If you are constructing your own cables be sure to use two conductor shielded digital cable rated at a 120 ohms (this cable can be purchased at almost all professional sound and lighting stores). Your cables should be made with a male and female 3-pin or 5-pin XLR connector on either end of the cable. For 5-pin connectors follow the illustration below and omit pins 4 and 5 as they are not used.



Please note: This is not the same as audio microphone cable. Audio cable has a different resistance rating and may cause erratic signal problems.

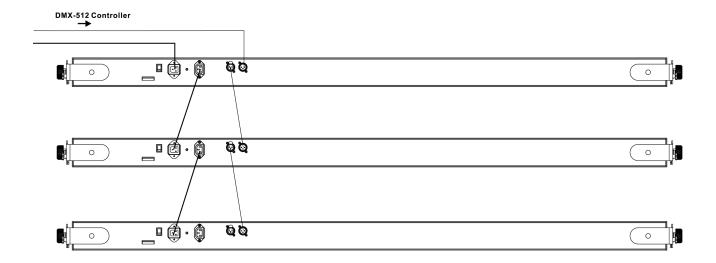
Be sure to follow the above figure when making your own cables. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a signal short circuit and erratic behavior.



#### **DMX-512 control connection**

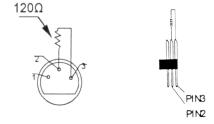
Connect the provided DMX XLR cable to the female 3-pin or 5-pin XLR output of your controller and the other side to the male 3-pin or 5-pin XLR input of the moving head

(Please refer to the diagram below.). You can chain multiple moving heads together through serial linking. The cable needed should be two conductor, shielded cable with XLR input and output connectors. Always be sure daisy chain your in and out data connections, never split or "Y" your DMX connections unless you are using an approved DMX splitter such as the Elation Opto Branch  $4^{TM}$  or DMX Branch/ $4^{TM}$ .



#### DMX-512 connection with DMX terminator

When longer runs of cable are used, you may need to use a terminator on the last fixture to avoid erratic behavior. A terminator is a 120 ohm 1/4 watt resistor that is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). The terminator is inserted in the female XLR connector of the last fixture in your daisy chain to terminate the line. Using a cable terminator (Elation part number Z-DMX/T) will decrease the possibilities of erratic behavior.



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

**5-Pin XLR DMX Connectors**. Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must

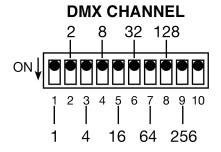
be used, these adaptors are readily available at most electric stores. The chart on the next page details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion											
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)									
Ground/Shield	Pin 1	Pin 1									
Data Compliment (- signal)	Pin 2	Pin 2									
Data True (+ signal)	Pin 3	Pin 3									
Not Used		Pin 4 - Do Not Use									
Not Used		Pin 5 - Do Not Use									

#### Understanding Fixture DMX addressing;

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control information sent out from the DMX controller. The allocation of this starting DMX address is achieved by combining various dipswitches located on the rear of the fixture.

Dipswitch 1 address equals 1
Dipswitch 2 address equals 2
Dipswitch 3 address equals 4
Dipswitch 4 address equals 8
Dipswitch 5 address equals 16
Dipswitch 6 address equals 32
Dipswitch 7 address equals 64
Dipswitch 8 address equals 128
Dipswitch 9 address equals 256



Dipswitch 10 is reserved for special functions

You can set the same starting address for all fixtures, or a group of fixtures, or set different address for each individual fixture. Be advised that setting all you fixtures to the same DMX address will subsequently control all fixtures in the same fashion, in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to "listen" to the channel number you have set, based on the quantity of control channels (DMX channels) of each fixture. That means changing the settings of one channel will only affect the selected

fixture.

In the case of the Design LED 60 Strip WA<sup>™</sup>, which is a 4 channel fixture (default), you should set the starting DMX address of the first unit to 1, the second unit to 5 (4 + 1), the third unit to 9 (4 + 5), and so on. The chart on page 24 details the proper starting DMX address dipswitch setting combination.

NOTE: The Design LED 60 Strip WA contains a total of 12 dipswitches. Only use dipswitches 1~9 to set the DMX address. Dipswitches 10~12 are used for special functions that will be explained on the next page.

#### 8. OPERATING MODES

This fixture can run in two different DMX modes, the following pages will detail the different operating modes as well as how to achieve the different operating modes.

**DMX Settings:** The chart below describes how to access the two different DMX modes. The chart below also defines how the channels will function in the different DMX modes.

DMX operation mode	DIP#12	White LEDS control channel	Ember LEDS control channel	Strobe channel	Master dimming
4 CH	OFF	1	2	3	4
2 CH	ON	1	2	N/A	N/A

Dipswitch 12: DMX Mode Selection - See the chart above to select either 4 or 2 channel mode.

*Manual Settings:* The chart below details the dipswitch setting for various manual settings.

Working	Dip	Dip	Dip	Dip	Dip	Dip	Dip	Dip	Dip	Dip	Dip		
Mode	#11	#10	#9	#8	#7	#6	#5	#4	#3	#2	#1		
No function	OFF	OFF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Sound	OFF	ON	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
control-Stand													
Alone													
Master	ON	OFF	White LEDs are automatically set to a max value of 100%.										
manual			Dipswitches 1~8 are used to control the values for the Amber										
control mode			LEDs from 0 to 100%										

**Dipswitch 10:** Sound-active operation, when dipswitch 10 is in the "ON" position the unit will change colors when it detects an audible sound. This function works in either standalone or master/slave mode.

#### **DMX Operation Notes:**

The fixture will automatically function in DMX mode whenever the unit receives a DMX signal. Please note: that this will override all manual settings regardless of dipswitch positions.

This unit will keep and retain the last DMX command in the event of DMX signal failure. To reset the fixture you must turn the power off.

#### **DMX LED Indicator:**

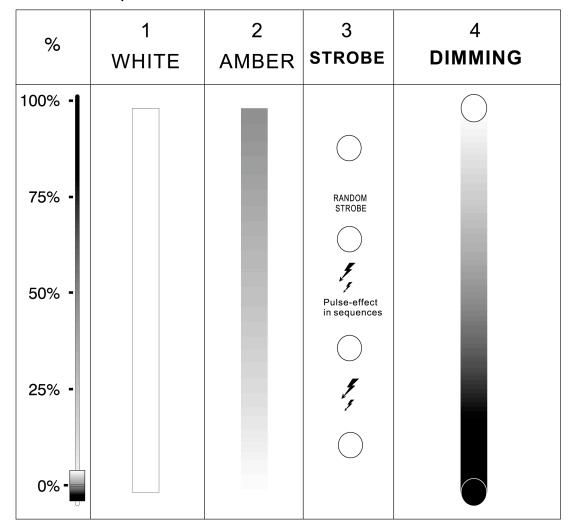
The fixture has an LED indicator located by the dipswitches. This indicator has two functions as detailed below;

- 1) LED flashing green = No incoming DMX signal, fixture will function in stand-alone mode. Use the dipswitches to adjust the manual settings.
- 2) LED Solid Green = Fixture is receiving a DMX signal and will function in DMX mode. Use the dipswitches to set the DMX address.

#### 9. DMX CHANNEL TRAITS

4 Channel Mode (default): This chart details a simple layout of the DMX channel assignment in 4-channel mode.

DLED 60 Strip WA DMX Channel Chart: 4Channel Mode (Defult)



**CHANNEL 1: White** 

**CHANNEL 2: Amber** 

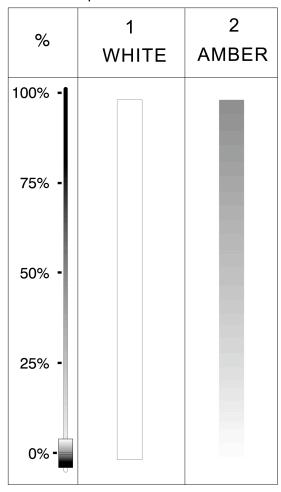
**CHANNEL 3: Strobe** 

**CHANNEL 4: Master Dimmer** 

DMX cha	nnel's functions and their values (4 Channel Mode - Default):
<u>Channel</u>	1 - White:
0-255	White (0 = Black, 255 = 100% White)
<u>Channel</u>	2 - Amber:
0-255	Amber (0 = Black, 255 = 100% Amber)
<u>Channel</u>	3 - Strobe:
0	Normal Operation
1~95	Strobe effect slow to fast
96-127	No function
128-159	Pulse effect in sequences
160-191	No function
192-223	Random strobe effect slow to fast
224-255	No function
<u>Channel</u>	4 – Master Dim
This char	nnel has two functions depending on the operating mode. When running the built-in
programs	this channel will control the program speed.
0-255	Dimming (0%-100%) ~ Normal Operation
0-255	Speed (min to max) ~ When running built-in programs on channel 4

**2** Channel Mode (user setting via dipswitch 12): This chart details a simple layout of the DMX channel assignment in 2-channel mode.

DLED 60 Strip WA DMX Chart - 2Ch Mode



CHANNEL 1: White CHANNEL 2: Amber

DMX chani	nel's functions and their values (2 Channel Mode):								
Channel 1	- White:								
0-255 White (0 = Black, 255 = 100% White)									
Channel 2	- Amber:								
0-255	Amber (0 = Black, 255 = 100% Amber)								

## **DMX Address Quick Reference Chart**

DIP SWITCHES ———																							
						*					[	Dip	Sw	itch	Р	siti	on						
	DMX DIP Switch Settings					#9	Χ	Χ	Χ	Х	Χ	Χ	Χ	Χ	0	0	0	0	0	0	0	0	
	DIVIX		= OF		ings	#8	Χ	Χ	Χ	Χ	0	0	0	0	Χ	Χ	Χ	Χ	0	0	0	0	
			= OF   = ON			#7	Χ	Χ	0	0	Χ	Χ	0	0	Χ	Χ	0	0	Χ	Χ	0	0	
						#6	Χ	0	Χ	0	Χ	0	Χ	0	Χ	0	Χ	0	Χ	0	Χ	0	
$\rightarrow$	#1	#2	#3	#4	#5						100		100										
	X	Χ	X	Χ	Х			32	64	96	128		192		256		320	352	384	416	448	480	
	0	Χ	Χ	Χ	Χ		1	33	65	97	129	161	193		257	289	321	353	385	417	449	481	
	X	0	X	X	X		2	34	66	98	130	162	194		258		322	354	386			482	
	0	0	X	X	X		3	35	67	99	131	163	195		259		323	355	387	419	451	483	
	X	Χ	0	Χ	X		4	36	68	100	132	164		228	260		324	356	388	420	452	484	
	0	Χ	0	X	Χ		5	37	69	101	133	165	197		261	293	325	357	389	421	453	485	
	Χ	0	0	Χ	Χ		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486	
	0	0	0	Χ	Χ		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487	
	Χ	Χ	Χ	0	Χ		8	40	72	104	136	168	200		264		328	360	392	424	456	488	
	0	Χ	Χ	0	Χ		9	41	73	105	137	169	201	233	265		329	361	393		457	489	
	Х	0	Χ	0	Χ		10	42	74	106	138		202		266		330	362	394	426	458	490	
⊑	0	0	Χ	0	Х		11	43	75	107	139			235	267			363	395	427	459	491	
.0.	Χ	Χ	0	0	Χ		12	44	76	108	140		204		268		332	364	396		460	492	
osition	0	Χ	0	0	Χ		13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493	SS
Ро	Χ	0	0	0	Χ		14	46	78	110	142	174	206		270		334	366	398	430	462	494	ddre
	0	0	0	0	Χ		15	47	79	111	143	175	207		271	303	335	367	399		463	495	р
Switch	Χ	Χ	Χ	Χ	0		16	48	80	112	144	176		240			336	368	400		464	496	Ă
Ξ	0	Χ	Χ	Χ	0		17	49	81	113	145	177	209		273		337	369	401	433	465	497	×
	Χ	0	Χ	Χ	0		18	50	82	114	146	178	210		274		338	370	402	434	466	498	
Dip	0	0	Х	Χ	0		19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499	
	Χ	Χ	0	Χ	0		20	52	84	116	148	180	212	244	276		340	372	404	436	468	500	
	0	Χ	0	Χ	0		21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501	
	Χ	0	0	Χ	0		22	54	86	118	150	182	214		278	310	342	374	406	438	470	502	
	0	0	0	Χ	0		23	55	87	119	151	183	215	247	279		343	375	407	439	471	503	
	Χ	Χ	Χ	0	0		24	56	88	120	152	184	216		280		344	376	408		472	504	
	0	Χ	Χ	0	0		25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505	
	Χ	0	Χ	0	0		26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506	
	0	0	Χ	0	0		27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507	
	Χ	Х	0	0	0		28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508	
	0	Х	0	0	0		29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509	
	Χ	0	0	0	0		30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510	
	0	0	0	0	0		31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511	

**DMX Address** 

The center numbers of this chart (1-511) represent a DMX address. The "X"'s and "O"'s along the top and side of the chart represent dip switch poistion ("X" for off and "O" for on). Find your desired DMX address from the center chart. Identify the position for dip switches 1-5 from the chart on the left and dip switches 6-9 from the chart on the top. Adjust the dip switches on your fixture to match the position settings of the chart. For fixtures with 10 dip switches; dip switch 10 is reserved for special functions.

#### 10. CLEANING AND MAINTENANCE

The consider the following point during normal service and inspection:

- Be sure all screws and fasteners are securely tightened at all times. Lose screws
  may fall out during normal operation resulting in damage or injury as larger parts
  could fall.
- 2. Electric power supply cables must not show any damage, material fatigue or sediments. Never remove the ground prong from the power cable.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



#### **CAUTION!**

Disconnect from mains before starting maintenance operation.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no user serviceable parts inside this, please refer all other service issues to an authorized Elation service technician.

Should you need any spare parts, please order genuine parts from your local dealer.

#### 11. 2-YEAR LIMITED WARRANTY

- A. Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years, (730 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional® shall have no liability what so ever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, Elation Professional® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bare

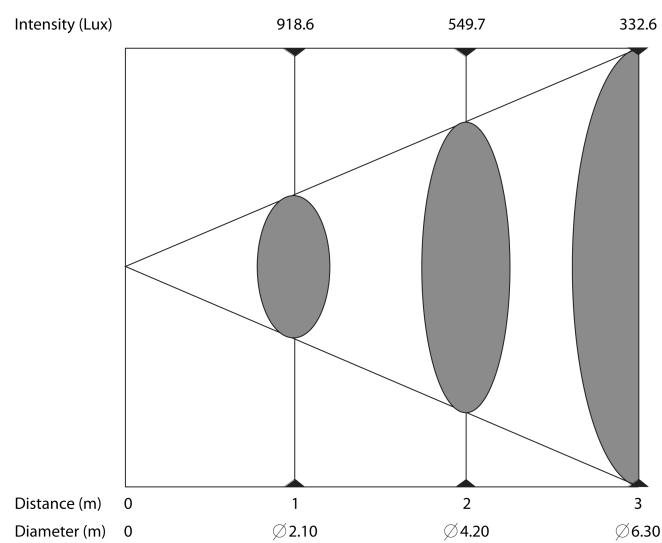
identifying marks to that effect.

- E. Elation Professional® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to Elation Professional® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

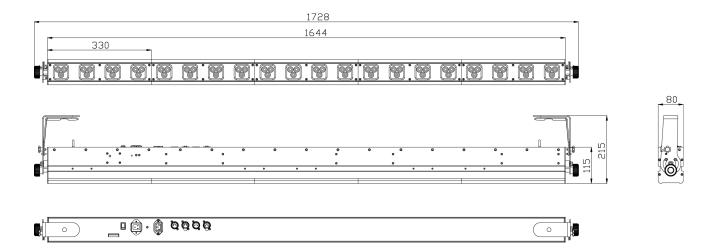
## 12. PHOTOMETRIC DATA

# DLED 60 Strip WA Photometric Data

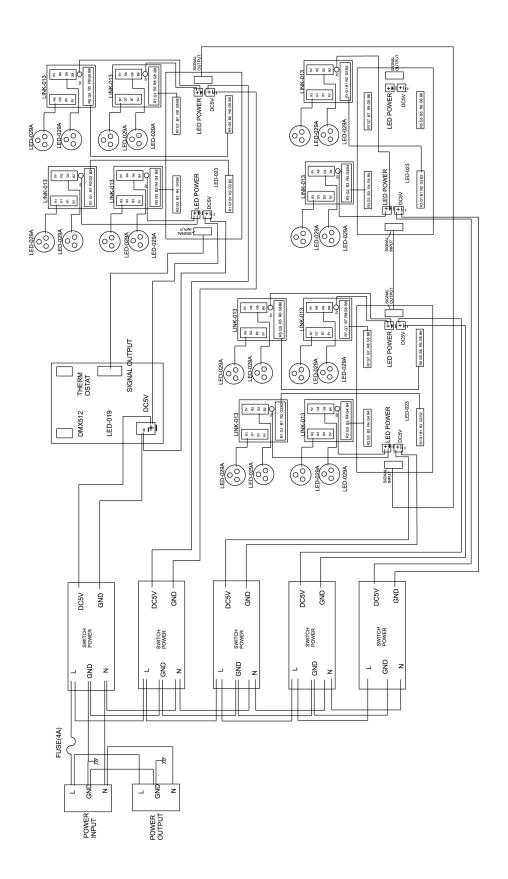
# Beam Angle 80°



# 13. DIMENSIONAL DRAWINGS



## 14. CIRCUIT SCHEMATIC



#### 15. TECHNICAL SPECIFICATIONS

Power supply: 100~240 AC, 50Hz~60Hz

Power consumption: MAX. 140w

LED Configuration: 60 1Watt Units (20 x Red, 20 x Green 20 x Blue)

Packing dimensions: 174.5 x14.5x 21.5cm

Weight: 10.5.Kgs

DMX Channels: 2 or 4, DMX Channel mode

Drive: Standard DMX-512, 3 pole XLR; [+] = Pin 3, [-] = Pin 2,

[Ground] = Pin 1 or

Standard DMX-512,5 pole XLR; n/a = Pin 5, n/a = Pin 4,

[+] = Pin 3, [-] = Pin 2, [Ground] = Pin

Color Mixing: RGB Color Additive Mixing

Beam Angle: 91°

Fuse:  $120v = GMA \ 220v/4A$ 

240v = GMA 220v/2A

Dimmer: Continuous Dimming 0~100%

Strobe: Electronic Strobe 0~18 Fps

Lamp Life: 100,000 Hours Rated Life

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

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